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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/087,496	05/29/1998	JAN E. FORSLOW	2372-5	9614

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EXAMINER

NGUYEN, TOAN D

ART UNIT PAPER NUMBER

2665

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/087,496

Applicant(s)

JAN E. FORSLOW

Examiner

Toan D Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-121 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 49-58,66-75,77,78,80-102,110-116 and 119-121 is/are rejected.
- 7) ☒ Claim(s) 59-65,76,79,103-109,117 and 118 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 49-58, 66-75, 77-78, 80-102, 110-116 and 119-121 are rejected under U.S.C. 103(a) as being unpatentable over Bauchot (U.S. Patent 5,970,062) in view of Raychaudhuri et al. (U.S. Patent 5,638,371).

For claims 49, 51, 56-58, 66-68, 77, 80-82, 87-88, 97, 99, 110-111, 115 and 119, Bauchot discloses method and apparatus for providing wireless access to an ATM network comprising:

establishing a packet session over the radio interface for the mobile radio terminal using radio resources from the pool during which plural application flows are communicated with an external network entity, each application flow having a corresponding stream of packets (col. 1 line 46 to col. 3 line 13, col. 6 lines 40-50);

defining a corresponding quality of service parameter for each of the plural application flows such that different quality of service parameters may be defined for different ones of the application flows (col. 6 lines 40-50); and

determining whether radio sources from the pool are available to support the quality of service parameters defined for each of the plural application flows (col. 13 lines 22-26). In

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claims 55, 66 and 86, Bauchot discloses further making a reservation request from the mobile host to the gateway node for a particular quality of service for an individual application flow (figure 4, col. 13 line 52 to col. 14 line 4); determining whether the reservation request can be met (col. 12 lines 19-43); and if so, establishing a logic bear between the mobile host and the gateway node that includes the serving node to bear plural ones of the individual application flows having different corresponding quality of service (col. 12 lines 19-43). Bauchot discloses further in claims 77 and 115, the serving node merging packets from different sessions with the same quality of service (col. 8 line 60 to col. 9 line 9).

However, Bauchot does not explicitly disclose determining whether radio sources from the pool are available to support the quality of service parameters defined for each of the plural application flows. In an analogous art, Raychaudhuri et al. disclose determining whether radio sources from the pool are available to support the quality of service parameters defined for each of the plural application flows (col. 4 lines 45-53). One skill in the art would have recognized radio sources to use teaching of Raychaudhuri et al. in the system of Bauchot. Therefore, it would have been obvious to one of ordinary skill in the art at the time invention, to use the radio sources as taught by Raychaudhuri et al. in Bauchot's system with the motivation being to provide a multiservices integrated framework for voice, video, data and multimedia services (col. 4 lines 41-43).

For claims 50 and 98, Raychaudhuri et al. in view of Bauchot disclose delivering packets corresponding to each application flow from the external network entity to the mobile radio terminal in accordance with the defined corresponding quality of service (figure 1, col. 4 lines 36-53).

For claims 52, 83 and 100, Raychaudhuri et al. disclose different qualities of service have different allocated bandwidths, delays, or reliability (figure 5, col. 10 lines 28-29).

For claims 53, 84 and 101, Bauchot discloses the different quality of services include one class of service that is best effort where packets in an application flow may be dropped and another class of service that is predictive where packets in an application flow are not dropped (col. 11 lines 20 to col. 12 line 33).

For claims 54, 85 and 102, Bauchot discloses a quality of service includes a delay class that specifies one or more of the following: a maximum packet transfer rate, a mean packet transfer rate, and a packet burst size of an application flow (col. 10 lines 3-47 and col. 11 lines 20-61).

For claims 68-69 and 119-120, Bauchot discloses the serving node determining if the reservation request for the particular quality of service is permitted by a subscription corresponding to the mobile radio host (figure 4, col. 13 line 52 to col. 14 line 4).

For claims 70-73, 89-92, 112 and 121, Bauchot discloses the evaluating step includes the serving node estimating a delay and a bandwidth requirement corresponding to the request quality of service (figure 4, col. 12 line 44 to col. 14 line 31).

For claims 74-75, 93 and 113-114, Bauchot discloses the gateway node scheduling transfer of packets corresponding to one of the application flows to ensure that the reserved quality of service for that application flow is met (figure 5, col. 14 lines 32-67).

For claims 78 and 116, Bauchot discloses the merging is performed using first in first out scheduling except when packets cannot be delivered within a specified time (col. 14 line 32 to col. 17 line 41).

For claim 94, Raychaudhuri et al. in view of Bauchot disclose the serving node includes:
a first set of queues storing packets having the same quality of service class and data packet communications session (figure 9, col. 11 lines 18-25);
a second set of queues storing packet having the same quality of service class and the same mobile terminal (figure 9, col. 11 lines 18-25); and
a third set of queues storing packets being served in a same geographic area and having the same quality of service class (figure 9, col. 11 lines 18-25).

For claims 95-96, Bauchot in view of Raychaudhuri et al. discloses:
a reservation controller configured to reserve a different quality of service for different ones of plural data packet streams associated with corresponding applications operating at the mobile radio terminal and established during a data session when the mobile radio terminal is attached to the radio packet network, the reservation controller also being configured to request from the radio network, reservation of radio resources from the pool to support the different quality of services defined for the different data packet stream (figure 4, col. 12 line 44 to col. 14 line 31).

Objection To Claims, Allowable Subject Matter

3. Claims 59-65, 76, 79, 103-109 and 117-118 are objected to as dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the information of the base claims and any intervening claims.

Response to Arguments

4. Applicant's argument filed on 11/20/2001 have been fully considered, but are moot in view of new ground(s) of rejection.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 703-305-0140. The examiner can normally be reached on Monday- Friday (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 703-308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

TN
T.N.



ALPUS H. HSU
PRIMARY EXAMINER